

**REMARKS**

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 8-17 are now present in this application. Claims 8, 15, 16 and 17 are independent.

Amendments have been made to the specification, and claims 8, 10, 11 and 15-17 are amended. No new matter is involved.

Reconsideration of this application, as amended, is respectfully requested.

**Continued Traversal of Holding of Restriction/Election of Species Requirement and Withdrawal of claims 15-17 from Consideration on their Merits.**

Initially, Applicant notes that not all of Applicants' grounds of traversal of the restriction/election of species requirement have not been made. This denies Applicant substantive and procedural due process under the Administrative Procedures Act, and violates MPEP §707.07(f), which requires that all of Applicants' grounds of traversal be treated on their merits. See, in this regard, MPEP §707.07(f).

The Office Action completely fails to address Applicant's arguments which traverse the election of species requirement. Applicant considers this a tacit withdrawal of the election of species requirement.

The Officer Action also improperly fails to address Applicant's arguments that there is no undue administrative burden on the Examiner to examine all pending claims. Although this failure is a tacit admission that all claims should be examined on their merits, the Office Action

improperly fails to examine all claims on their merits.

Lastly, Applicant points out that the Examiner has no authority whatsoever to ignore the explicit requirement of 37 CRFR §1.475 to examine on their merits claims directed to a process and an apparatus specially designed for carrying out the process.

There are no reservations in the wording of 37 CFR §1.475 to the effect that this requirement does not apply if the apparatus can also carry out other processes, and the Examiner has not pointed to any authority for this exception to the explicit requirement of 37 CFR §1.475.

Accordingly, Applicant respectfully submits that the restriction/holding of lack of unity of invention is improper and should be withdrawn, and all pending claims should be examined on their merits.

**Contingent Petition under 37 CFR §1.181 and §1.244**

Should the Examiner refuse to withdraw the restriction/lack of unity of invention requirement and refuse to examine claims 15-17 on their merits, Applicant respectfully requests that this continued traversal of the restriction/lack of unity of invention requirement and withdrawal of claims 15-17 from consideration on their merits be treated as a petition under 37 CFR §1.181 and 1.244 (which do not require a fee).

**Information Disclosure Statement**

Applicant thanks the Examiner for considering one of the two references cited on the PT/SB/08. Even though the Examiner has initialed both references on the PTO/SB/08, which signifies that he had reviewed both cited references, the Office Action indicates that the

Examiner has not considered EP 07 82 209. Applicant is enclosing a copy of EP 07 82 209 and asks that the Examiner consider that reference on its merits and indicate to Applicant in an appropriate manner (since that reference has been initialed already on the PTO/SB/08) that it has been considered.

**Specification Objection**

The specification is objected to for not using section headings. This objection is respectfully traversed.

Initially, Applicant respectfully submits that there is no explicit requirement in 37 CFR §1.77 that section headings be provided, and that Rule of Practice only states that the specific sections enumerated “should be” included in the application. Therefore, there is no requirement on which to base this objection.

Nevertheless, in the interest of expediting prosecution of this Application, section headings are being provided by amendment of the specification to supplement the already existing section headings.

Accordingly, reconsideration and withdrawal of this objection are respectfully requested.

**Specification and Drawing Amendments**

The specification and drawings are being amended to make them consistent with one another. The heat exchanger (11) in Fig. 4 should actually be heat exchanger (21). Numeral (11) in Fig. 4 is changed to read - - (21) - - to be consistent with the amended specification and so that the drawing numbering is also consistent.

Inspection of drawing Fig. 5 reveals that the output from generator (11) is connected directly to DC, which is consistent with the specification, which describes generator (11) as a “direct current generator.” Accordingly, the adjective “A/C”, which means “alternating current,” has been deleted from Fig. 5 to be consistent with the rest of drawing Fig. 5 and the specification.

**Rejections under 35 USC §112, First Paragraph**

Claims 8-14 stand rejected under 35 USC §112, first paragraph for failure to comply with the written description requirement. This rejection is respectfully traversed.

The basis for the rejection is that the wording “means for” is “new matter.” Applicants respectfully submit that there is substantial written description for the conventional “means for” language in these claims.

Nevertheless, the rejection is moot because the claims are amended to remove the “means for” language from claims 8-14.

Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

**Rejections under 35 USC §102**

Claim 8 stands rejected under 35 USC §102(b) as being anticipated by JP 01-234024 (“JP ‘024”). Claims 8 and 9 stand rejected under 35 USC §102(b) as being anticipated by JP 61-190866 (“JP ‘866”). Claims 8-13 stand rejected under 35 USC §3,976,506 to Landau. These rejections are respectfully traversed.

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and *Hazani v. Int'l Trade Comm'n*, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the Examiner, inherency may not be established by probabilities or possibilities. What is *inherent*, must necessarily be disclosed. See *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981); *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the applicant is entitled to the patent. However, when a *prima facie* case is made, the burden shifts to the applicant to come forward with evidence and/or argument supporting patentability. Patentability *vel non* is then determined on the entirety of the record, by a preponderance of evidence and weight of argument, *In re Gulag*, 62 USPQ2d 1151 (Fed. Cir. 2002).

Moreover, as stated in MPEP §707.07(d), where a claim is refused for any reason relating to the merits thereof it should be "rejected" and the ground of rejection fully and clearly stated.

Additionally, findings of fact and conclusions of law by the USPTO must be made in accordance with the Administrative Procedure Act, 5 U.S.C. §706(A), (E) (1994). See *Zurko v. Dickinson*, 527 U.S. 150, 158, 119 S.Ct. 1816, 1821, 50 USPQ2d 1930, 1934 (1999).

A claim limitation is inherent in the prior art if it is necessarily present in the prior art, not merely probably or possibly present. *See Rosco v. Mirro Lite*, 304 F.3d 1373, 1380, 64 USPQ2d 1676 (Fed. Cir. 2002). The dispositive question regarding anticipation is whether one skilled in the art would reasonably understand or infer from the prior reference's teaching that every claim feature or limitation was disclosed in that single reference, *Dayco Products, Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368, 66 USPQ2d 1801 (Fed. Cir. 2003).

Initially, Applicant respectfully submits that the claim preamble is entitled to patentable weight for the following reasons.

A seminal case in whether or not to accord patentable weight to a claim preamble is the decision in *Kropa v. Robie*, 187 F.2d 150, 88 USPQ 478 (CCPA 1951), which involved a claim with a preamble that recited "an abrasive article." That preamble was determined by the court to be essential to point out the defined invention. The entire claim in issue recited "[A]n abrasive article comprising abrasive grains and a hardened binder comprising the additive reaction product of a substantially neutral unsaturated monomeric material and an unsaturated esterification product of an aliphatic alcohol and a polybasic acid." The court said that in a number of cases which determined the preamble to be given patentable weight, usually "there inhered in the article specified in the preamble a problem which transcended that before prior artisans and the solution of which was not conceived by or known to them. The nature of the problem characterized the elements comprising the article, and recited in the body of the claim or count following the introductory clause, so as to distinguish the claim or count over the prior art." The Court went on to say that "a resin artisan practicing the suggestion of the appellant's 1938 applications of adding 'carborundum' or sand to the resins there disclosed in the

proportions customary and appropriate for fillers would not inevitably or necessarily produce an abrasive article as that term is commonly known and understood in the abrasives industry. The disparity between the well known percentage of material to be added to the resin as a filler and that to be added for an abrasive article is too great to admit of the conclusion that an artisan practicing the former would inevitably secure the latter.”

In other words, the preamble language was needed to indicate that what was recited in the body of the claim did not inherently constitute an abrasive article and that the preamble language therefore did give life and meaning to the claims and had to be given patentable weight to limit the claimed invention to limit it to an abrasive article.

Applicants respectfully submit that *Kropa v. Robie* supports the position that the language, “load variation system for protection of high temperature fuel cells that are subject to load variations of at least thirty percent over a period of 15 seconds” has to be given patentable weight to limit the claimed invention to a load variation system for protection of high temperature fuel cells that are subject to load variations of at least thirty percent over a period of 15 seconds , because the body of the claim does not necessarily/inherently recite that subject matter.

Furthermore, Applicants respectfully note that the Court of Appeals for the Federal Circuit, the successor court to the Court of Customs and Patent Appeals, which decided *Kropa v. Robie*, has stated that whether to treat claim preamble language as a positively recited claim limitation is “resolved only on review of the entirety of the patent to gain an understanding of what the inventors actually invented and intended to encompass by the claim;” *Corning Glass Works v. Sumitomo Electric USA, Inc.*, 9 USPQ2d 1962, 1966 (Fed. Cir. 1989). This Court also

stated that “Clear reliance on the preamble during prosecution to distinguish the claimed invention from prior art may indicate that the preamble is a claim limitation because the preamble is used to define the claimed invention.” *Catalina Marketing International v. Coolsavings.com, Inc.*, 62 USPQ2d 1781, 1785 (Fed. Cir. 2002); *Bristol-Meyers Squibb Co. v. Ben Venue Labs., Inc.*, 58 USPQ2d 1508, 1513 (Fed. Cir. 2001).

In this Amendment, Applicant is actively arguing that the claimed preamble language sets forth positively recited features of Applicants’ claimed invention that should be given patentable weight in the *ex parte* prosecution record of this Application.

With respect to the rejection of claim 1 based on JP ‘024, Applicant respectfully submits that JP ‘-24 does not disclose the claim preamble features and instead, is directed to a simple DC power storage system that uses low temperature fuel cells that do not have the characteristics of Applicant’s claimed high temperature fuel cells or a load variation system for protection of high temperature fuel cells that are subject to load variations of at least thirty percent over a period of 15 seconds, as claimed.

With respect to the rejection of claims 8 and 9 based on JP ‘866, Applicant respectfully submits that this reference also fails to disclose Applicant’s claimed high temperature fuel cells or a load variation system for protection of high temperature fuel cells that are subject to load variations of at least thirty percent over a period of 15 seconds, as claimed.

Additionally, Applicant respectfully submits that JP ‘866 does not disclose a buffer or storage at all, let alone, as claimed. As Applicant understands the English language translation of JP ‘866, upon which the rejection is based, the load is element 20, and element 15 is not a buffer for storage of surplus energy, but is merely an alternate load to the load 20 to prevent

generation of excessive voltage by the fuel cell electrodes.

With respect to the rejection of claims 8-13, as amended, over Landau, Applicant respectfully submits that this reference also fails to disclose Applicant's claimed high temperature fuel cells or a load variation system for protection of high temperature fuel cells that are subject to load variations of more than five percent over a period of one, as claimed.

Support for the load variation amendments is found, for example, by inspection of Figs. 1-3, which show load variations of the claimed magnitude over various time frames, including (in Fig. 3), hours.

Additionally, Landau's boiler 20 is not a storage, or a buffer for storing, of surplus energy, arranged to function as a regulating system between the fuel cell and an energy consumption unit, as claimed. In Applicant's invention, the buffer, which may be a boiler, is a separate element from the fuel cell that is between the fuel cell and the receiver of the fuel cell energy. This differs from Landau, whose boiler 20 is an integral element of the power plant and is used simply to heat water to steam.

Accordingly, the Office Action fails to make out a *prima facie* case of anticipation of the claimed invention recited in claims 8-13.

Reconsideration and withdrawal of these rejections of claims 8-13 are respectfully requested.

#### **Rejections under 35 USC §103**

Claim 14 stands rejected under 35 USC §103(a) as being unpatentable over Landau in

view of either JP 10-334936 ("JP '936") or U.S. Patent 4,622,275 to Noguchi, or U.S. Patent 5,482,791 to Shingai. These rejections are respectfully traversed.

Because the rejection is based on 35 U.S.C. §103, what is in issue in such a rejection is "the invention as a whole, "not just a few features of the claimed invention. Under 35 U.S.C. §103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter *as a whole* would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under §103 is whether the claimed invention *as a whole* would have been obvious to a person of ordinary skill in the art at the time the invention was made. *See In re O'Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the claims must be considered in their entirety. *See Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. *See Uniroyal Inc. v. F-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert.

*denied*, 488 U.S. 825 (1988); *Ashland Oil, Inc. v Delta Resins & Refactories, Inc.*, 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), *cert. denied*, 475 U.S. 1017 (1986); *ACS Hospital Systems, Inc. v Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *See In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. *See In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. *See In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." *See C.R. Bard, Inc. v. M3 Sys. Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." *See In re Dembiczaik*, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, it is well settled that the Office must provide objective evidence of the basis used in a prior art rejection. A factual inquiry whether to modify a reference must be based on

objective evidence of record, not merely conclusory statements of the Examiner. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Furthermore, during patent examination, the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785788 (Fed. Cir. 1984). If the PTO fails to meet this burden, then the Applicant is entitled to the patent. Only when a *prima facie* case is made, the burden shifts to the applicant to come forward to rebut such a case.

Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977,988(Fed. Cir. 2006) (quoted with approval in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)).

In the sentence just prior to citing the *Kahn* case, the U.S. Supreme Court clearly stated that there has to be an apparent reason to combine the known elements in the manner claimed. The Office has the burden of making out a *prima facie* case of obviousness, i.e., by presenting objective factual evidence of a reason to combine the known elements in the manner claimed. The *KSR* decision did not lift that burden from the Office.

The articulated reasoning has to express a rationale explaining what would have led an ordinarily skilled artisan to combine selected features from each reference in a way that would have resulted in the claimed invention. See, *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741 (2007). Thus, the Supreme Court reaffirmed the fundamental principles set forth in the *Graham v. John Deere Co.* decision, cited and discussed above.

A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Initially, Applicants note that MPEP §706.02 requires the Examiner to confine prior art rejections to the best art available. Unfortunately, this has not happened in this Office Action. Instead of choosing a best allegedly auxiliary reference, and rejecting claim 14 based on the base reference and further in view of that best auxiliary reference, the Examiner has improperly made three separate rejections of claim 14 on three separate references.

Applicant respectfully submits that two of the alternative grounds of rejection should be withdrawn in accordance with MPEP §706.02.

Turning to the merits of the rejection, Applicant respectfully submits that Landau fails to disclose the invention recited in claim 8 for reasons set forth above, and that none of the auxiliary references are applied to remedy the shortcomings of Landau with respect to the claimed invention.

So, even if one of ordinary skill in the art were (for sake of argument only) properly motivated to modify Landau in view of any of the three alternatively applied auxiliary references, the so-modified version of Landau would still not disclose, suggest, or otherwise render obvious the claimed invention.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the claimed invention recited in claim 14.

Reconsideration and withdrawal of this rejection of claim 14 is respectfully requested.

### CONCLUSION

In view of the foregoing claim amendments and remarks, Applicant respectfully requests that the holding of lack of unity of invention and the election of species requirement be withdrawn, that claims 8-17 be examined on their merits, and that all pending claims be allowed.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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